IMPROVED PORTABLE APPARATUS FOR THE GENERATION OF NASCENT OZONE BY ELECTRICITY, FOR USE IN THE TREATMENT OF TUBERCULAR CATARRH, PERTUSSIS, CHLOROSIS, ANÆMIA, ETC.

MANUFACTURED BY

J. C. DITTRICH,

122 East 23d St., New York.

Small Portable Apparatus, Generating Ozone by Electricity, for use in the treatment of Tuberculosis, Pertussis, Chlorosis, Anæmia, Etc.

Dr. H. S. Norris, in the concluding paragraph of his treatise, *The Internal Administration of Ozone in the treatment of Phthisis*, [New York Medical Journal, Nov. 5, 1892,] says: "The benefits of an atmosphere highly charged with ozone in the *early* stages of phthisis have been noticed by observers for the past thirty years. Can the same benefits be secured by its internal administration, or by inhalation of the artificial product properly diluted, or by both together? The subject is one worthy of consideration, and seems to offer great possibilities."

Prompted by a suggestion made by this physician in his report of cases treated by ozone, a small portable apparatus has been constructed, inexpensive, but capable of generating ozone in therapeutic quantity by means of which patients may be treated by physicians at their office, or patients may use the apparatus at their homes.

Professor Augustus Caille, M.D., [Post-Graduate Medical School] of New York, has used such an apparatus in the treatment of tubercular catarrh, pertussis, anæmia and chlorosis. The results of his experience were published in the New-Yorker Med. Monatsschrift, March 15, 1893.

Prof. Caille reports his observations on the action of ozone on patients under his direct treatment, in four cases of tuberculosis of the apex, three of severe anæmia and five of pertussis. Two other physicians treated, at his suggestion, two additional cases of pertussis and eight cases of anæmia and chlorosis. His report, therefore, comprises twenty-two selected cases which were subjected to a protracted and

systematic ozone treatment, during the course of which the following points were considered:

1. Appetite.
2. Bodily weight.
3. Muscular power.
4. Vital capacity of the lung (noted in cubic inches.)
5. Proportion of oxyhæmoglobin in the blood.

Determination of the latter was made with the aid of the hæmatospectroscope of Henoque. In most of the cases the ozone apparatus was placed and employed in the homes of the patients, under the assumption that ambulatory treatment would prove more or less worthless and devoid of results. During the period of trial no medicines of any kind were given.

Prof. Caille concludes his observations with a recapitulation of the general results obtained:

1. Ozone inhalations by means of the ozone apparatus are *harmless to children and adults.*

2. Daily inhalations augment the proportion of oxyhæmoglobin 1 to 4 per cent. in a short time, and this proportion long remains stationary.

3. Of four typical cases of tubercular catarrh of the apex, no one was absolutely cured; in all cases, however, nutrition was improved.

(*Since Prof. Caille's report he has stated at the Academy of Medicine, meeting of June 1st, 1893, that in one case, the patient having continued the treatment for about twelve months at her own house, he could now say that there had also been an improvement in the physical signs at the apex.*)

4. In pertussis the ozone-inhalations have reduced

the duration of the disease and have appreciably mitigated the severity of the paroxysms.

5. In severe cases of anæmia and chlorosis, ozone inhalations have had a salutary effect by stimulating metamorphosis, *and have produced a cure, especially in cases in which the customary therapy remained without effect.*

6. The apparatus may be used with advantage for *the atmospheric disinfection of small rooms.*

The apparatus consists of batteries, transformer, condenser and ozone generator of special form and construction.

The whole is placed in a polished oak case, the batteries occupying the lower space. Immediately above the batteries, but separated from them by a wooden partition, is placed the induction coil or transformer, the primary coil being in connection with batteries. The turning on and off of the current is controlled by an improved switch. The secondary coil, giving the high tension necessary for the production of the electric effluvium required for the generation of ozone, is connected with the ozone tube, the conducting cords being of length sufficient to allow the tube to be held in the hand whilst the ozone is being inhaled by the patient.

This apparatus has the advantage that it places within the reach of the physician the means of producing ozone in therapeutic quantity at a low cost, the cost of operating also being but trifling.

For further particulars and price, apply to

J. C. DITTRICH,
122 East 23rd St.,
New York.